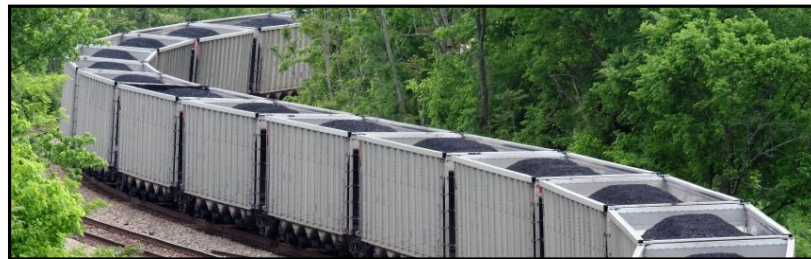


December 12-13, 2019



Surface Transportation Board

**Hearing on
Rail Revenue Adequacy**

Scott H. Group

Wolfe Research

Managing Director & Senior

Transportation Analyst

300159

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Office of Proceedings

December 10, 2019

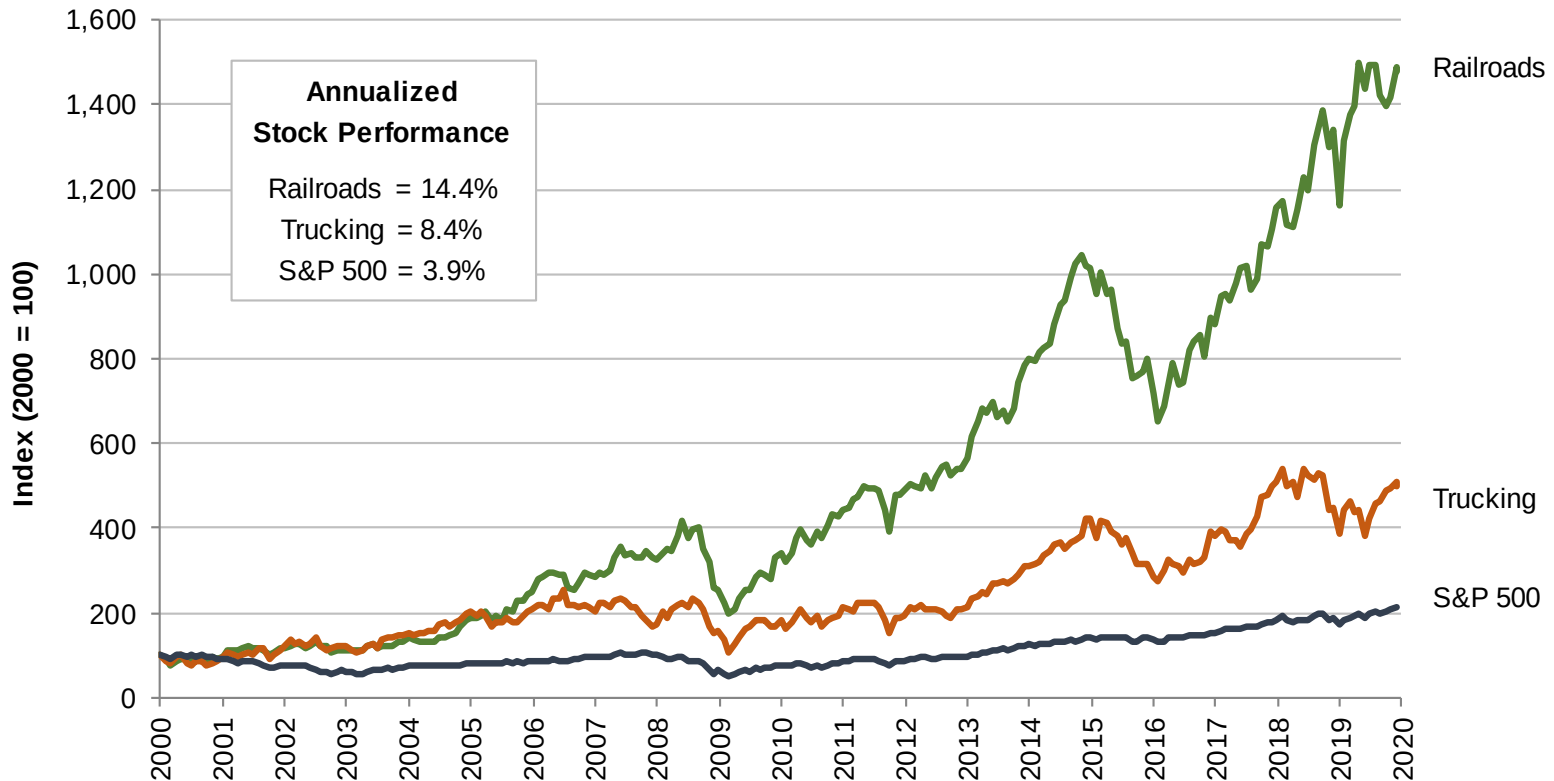
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Long-Term Rail Stock Performance

Rail Stocks Have Materially Outperformed Other Transports and the S&P 500 Since 2000



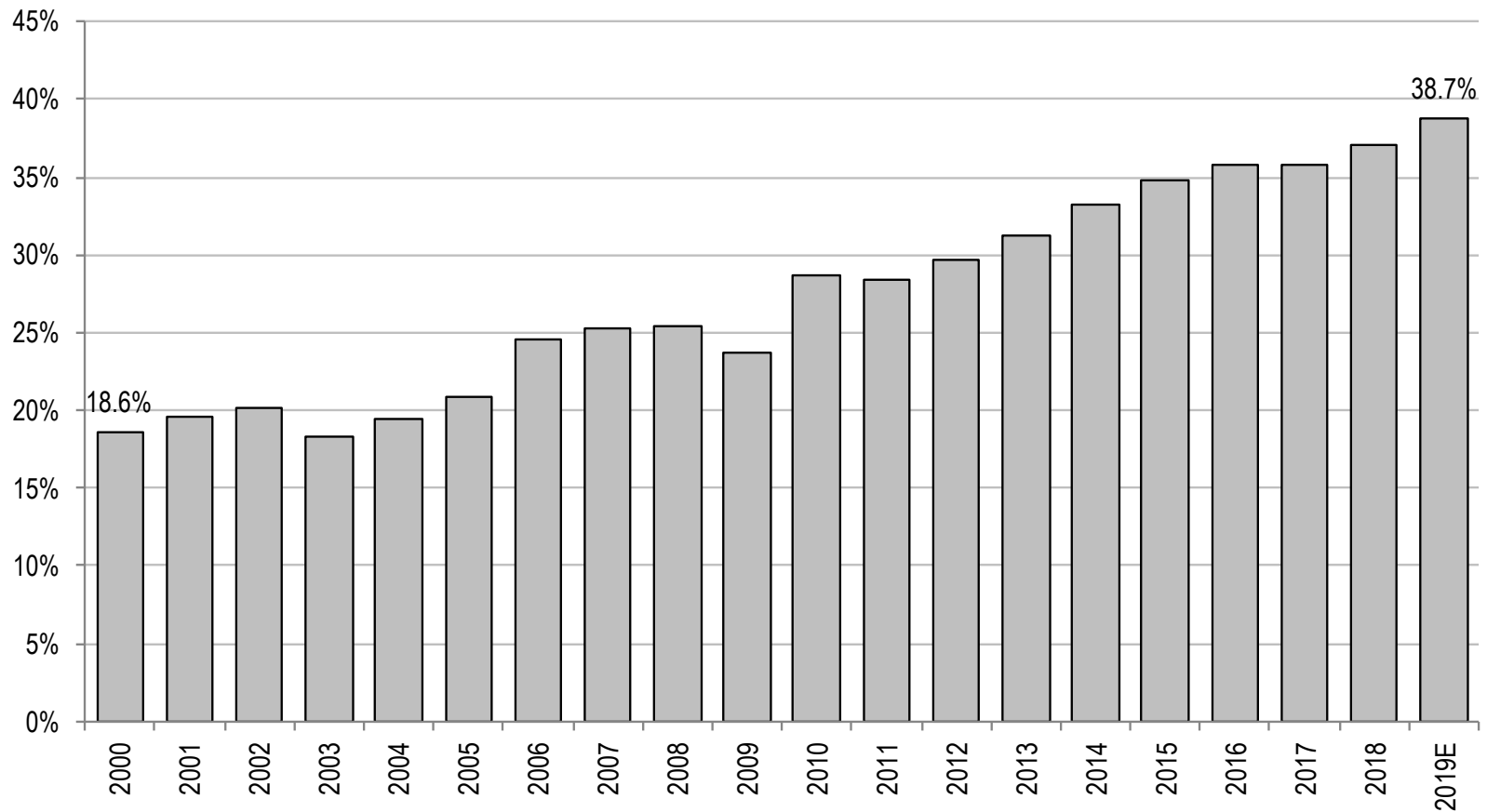
Note: Rail Index = BNSF, CNI, CP, CSX, NSC, UNP.

Trucking Index = CGI, CVTI, HTLD, JBHT, KNX, SNDR, USX, WERN, ARCB, ODFL, SAIA, R.

Source: FactSet Research Systems Inc.; Wolfe Research.

Long-Term Rail Operating Margins

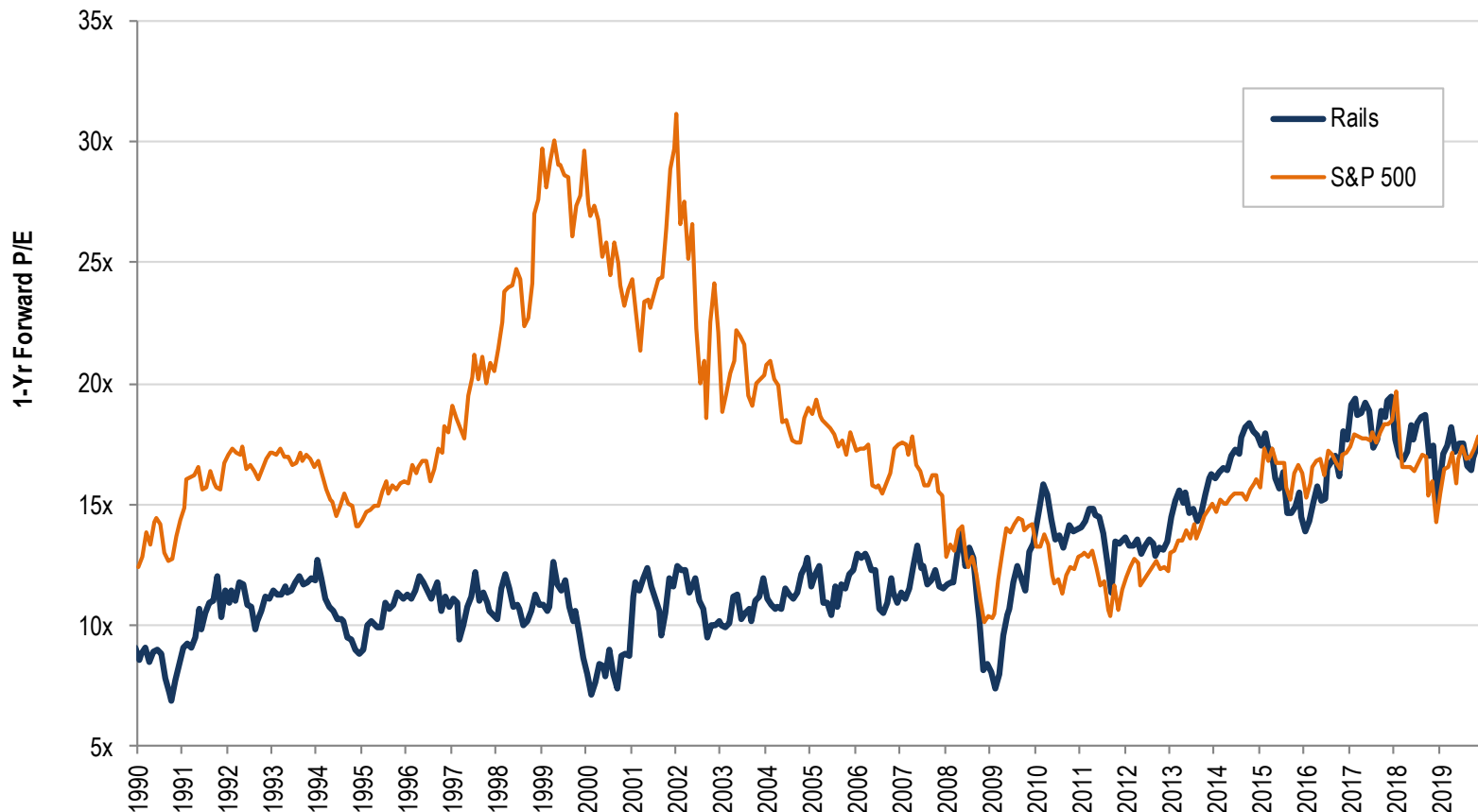
Rail Operating Margins Have Doubled Over the Last 20 Years



Note: Simple average of annual Class I rail operating margins, excluding BNSF.
 Source: AAR; Wolfe Research.

Rail Forward P/E Valuations vs. the S&P 500

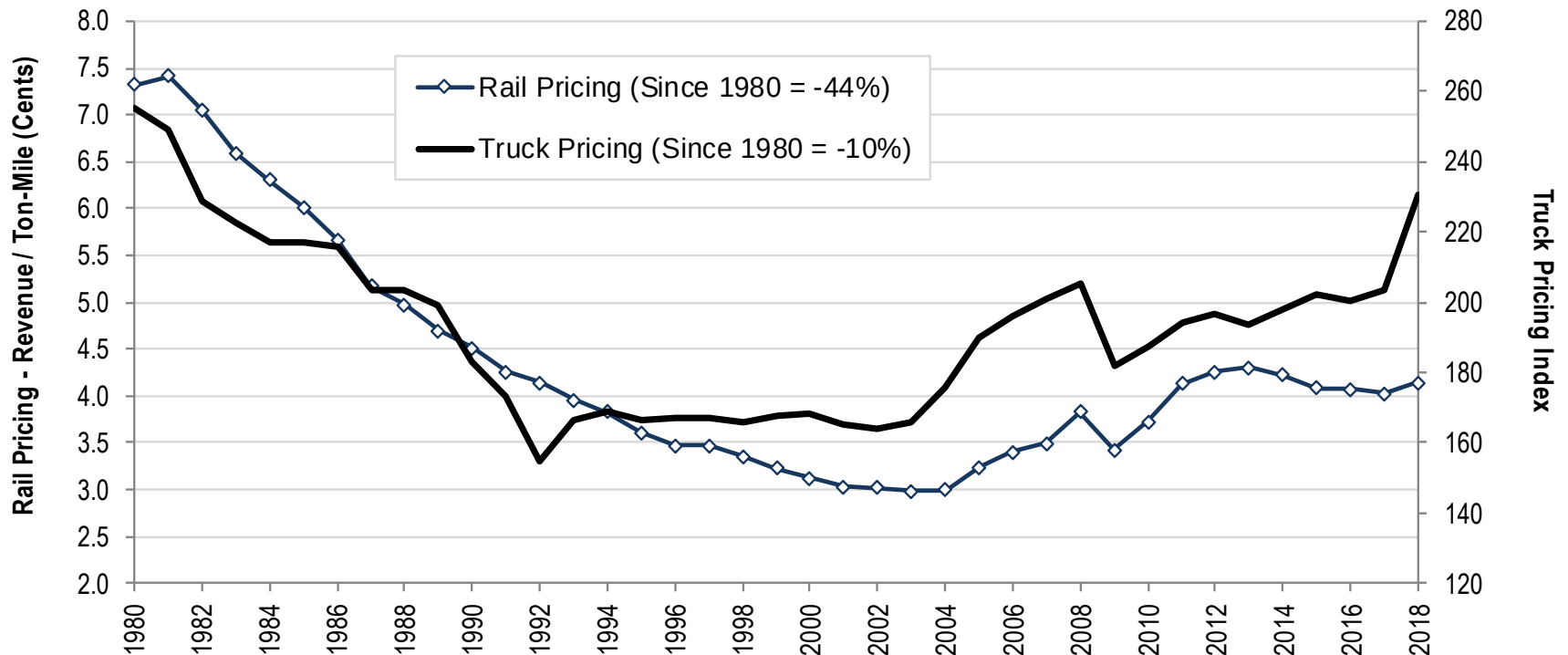
The Rails Now Trade at a Market Multiple After a Long Period Trading Below the S&P 500



Source: FactSet Research Systems Inc.; Wolfe Research.

Long-Term Rail vs. Truck Pricing

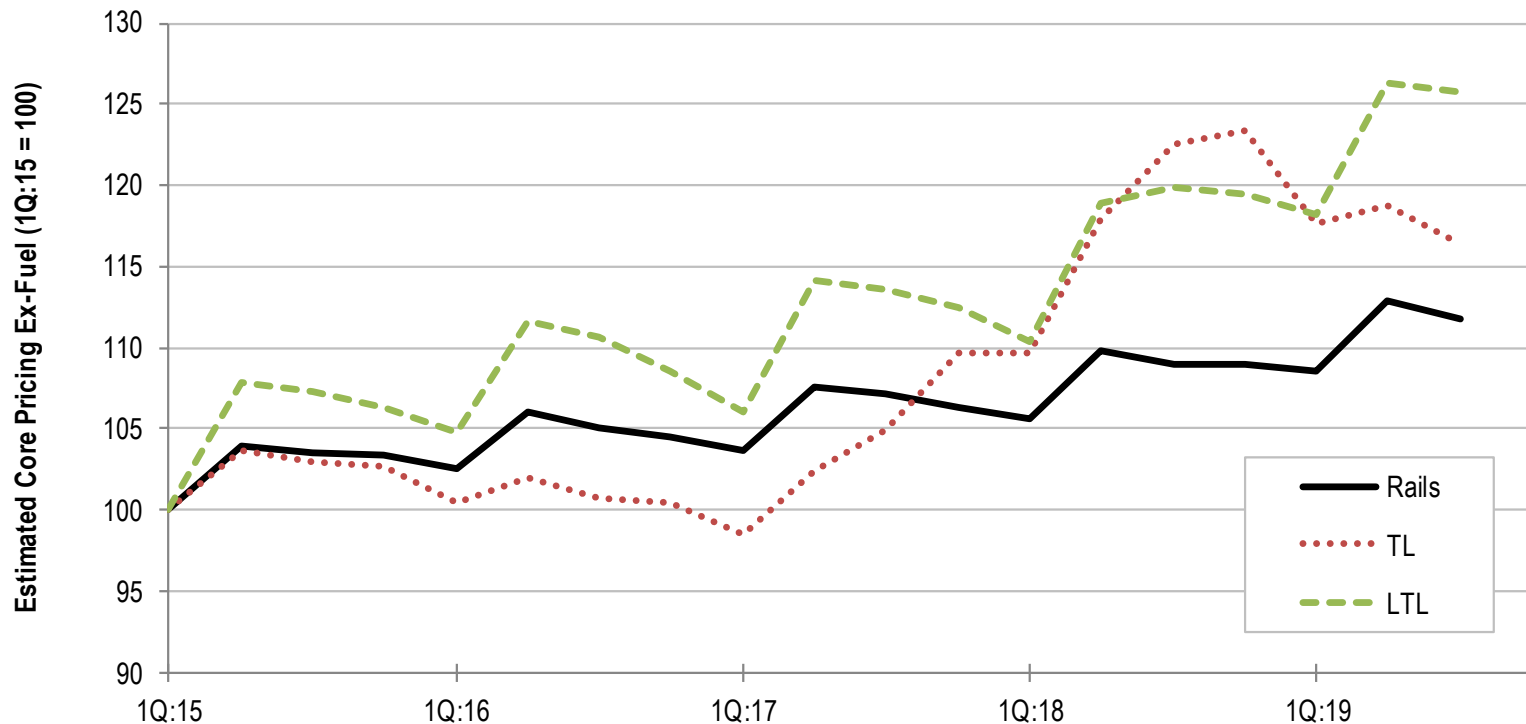
Rail Rate Increases Have Materially Lagged Truck Rate Increases Since Deregulation



Source: AAR; ATA; US Bureau of Economic Analysis (BEA); Wolfe Research.

Rail vs. TL vs. LTL Pricing

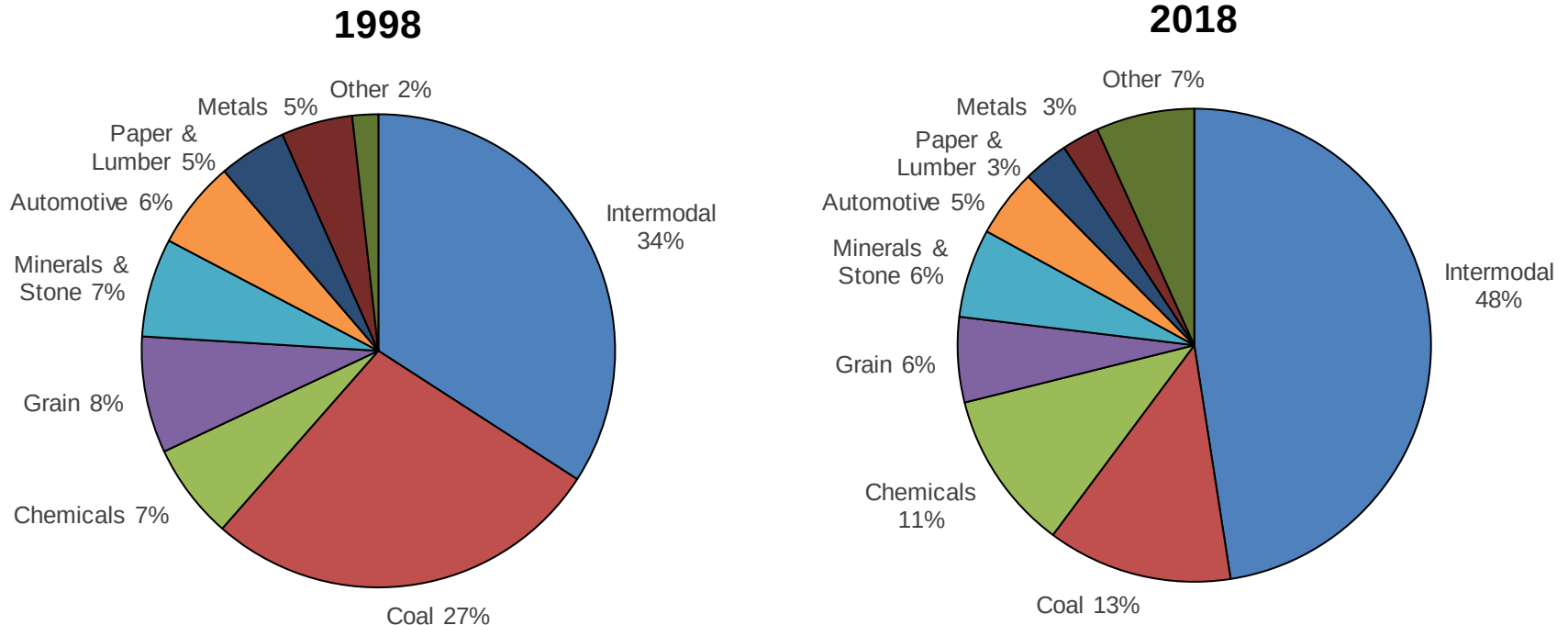
Rail Pricing Has Also Materially Lagged TL and LTL Pricing Over the Last 5 Years



Note: Rails = CNI, CP, CSX, NSC, UNP, KSU
 TL = CVTI, JBHT, KNX, USW, WERN
 LTL = ARCB, XPO, FDX, ODFL, SAIA, UPS, YRCW
 Source: Company reports; Wolfe Research.

Changing Rail Volume Commodity Mix

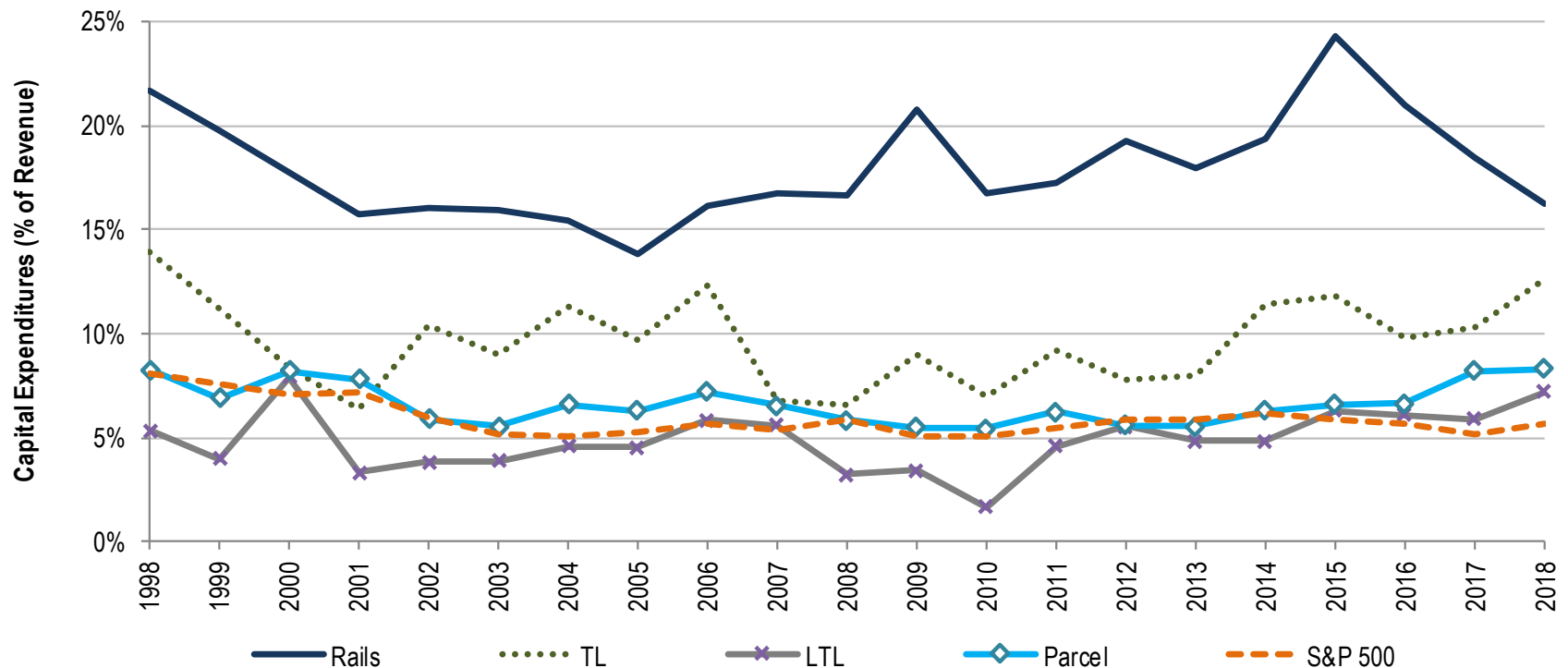
Over the Past 20 Years, Intermodal Exposure has Increased while Coal has Shrunk



Source: AAR; Wolfe Research.

Rail Capital Expenditures vs. Other Transports

Even with Lower CapEx the Past Couple of Years, Rails Still Spend Significantly Higher CapEx than Other Transportation Sectors



Note: Rail = Industry AAR data

TL = CVTI, HTLD, JBHT, SNDR, USX, WERN

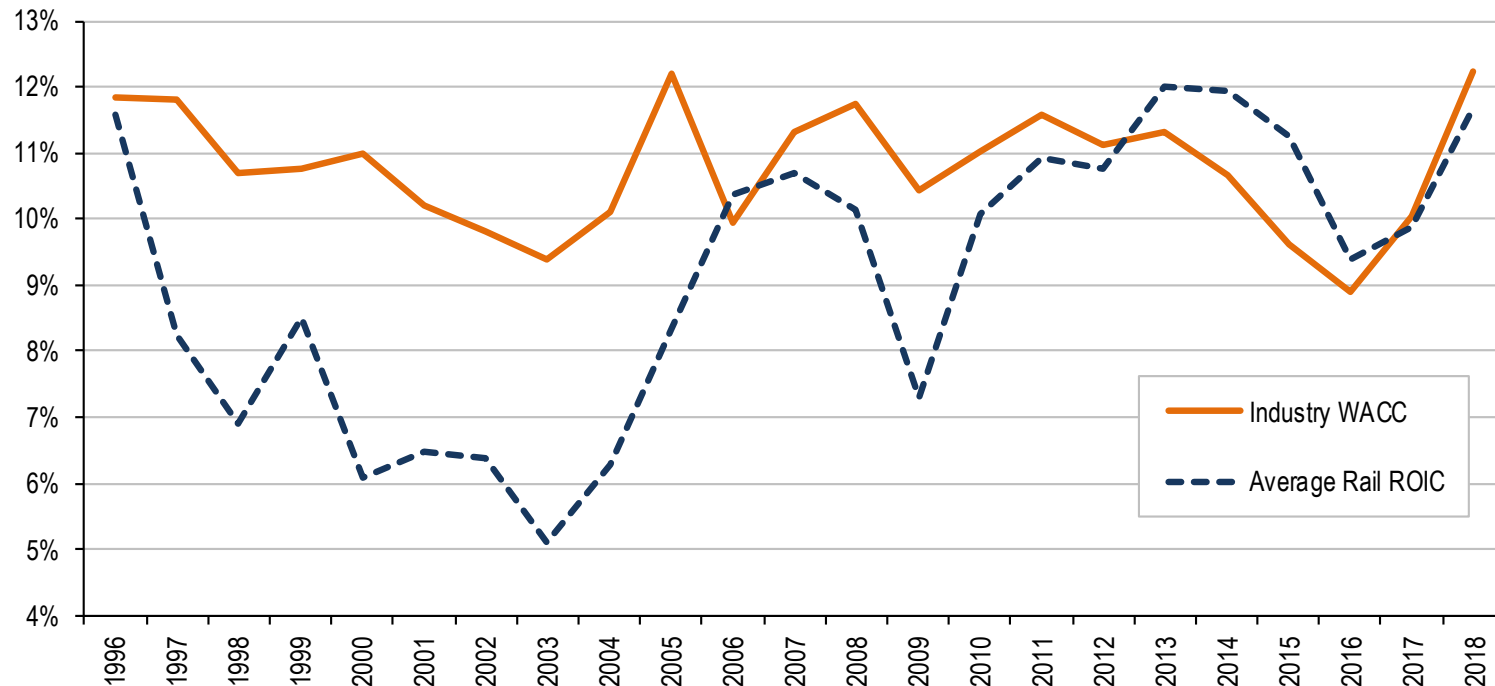
LTL = ARCB, ODFL, SAIA, WERN

Parcel = FDX, UPS

Source: AAR; Company reports; Wolfe Research.

Rail Return on Capital vs. Cost of Capital (WACC)

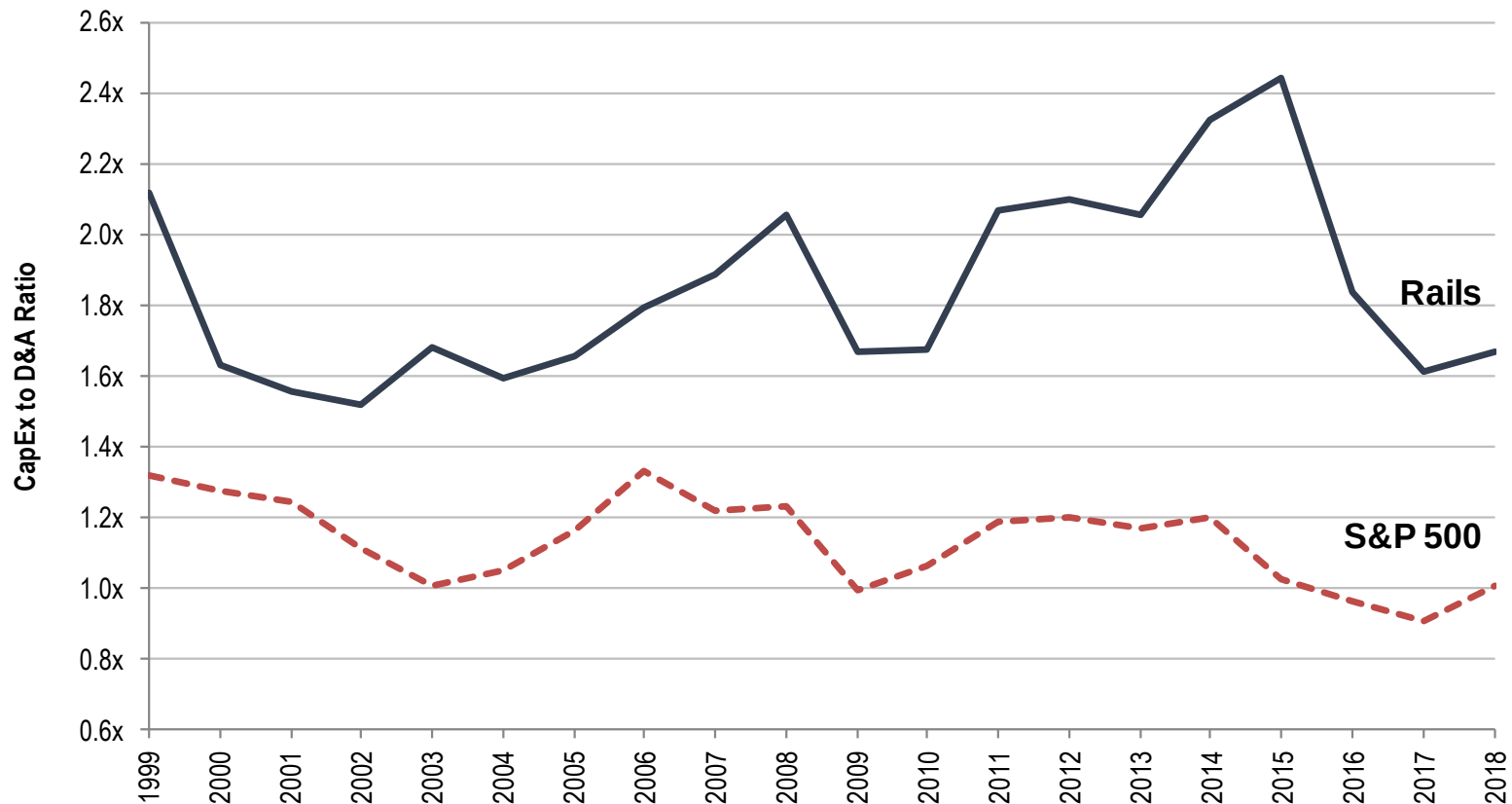
Based on STB Calculations, the Rails Are Starting to Earn their Cost of Capital



Source: STB; Wolfe Research.

Capital Expenditures to D&A Ratio

Rail CapEx Materially Exceeds their Depreciation Expense



Source: FactSet Research Systems Inc.; Company reports; Wolfe Research.

Adjusted Rail Return on Capital – Replacement Costs

(\$ million)	5-Year Avg Capex / D&A (2014-18)	Average PP&E (2017-18)	Gross UP PP&E (2017-18)	Increase in PP&E
Railroad				
CNI	2.29x	C\$35,981	C\$82,526	C\$46,545
CP	2.26x	C\$17,717	C\$39,989	C\$22,272
CSX	1.79x	\$31,881	\$57,093	\$25,212
NSC	1.98x	\$30,711	\$60,663	\$29,952
BNSF	1.97x	\$62,749	\$123,598	\$60,849
UNP	1.89x	\$52,142	\$98,334	\$46,192
KSU	2.04x	\$8,547	\$17,403	\$8,855
Average	1.98x			

**Using estimated
replacement costs,
rail returns would be
materially lower**



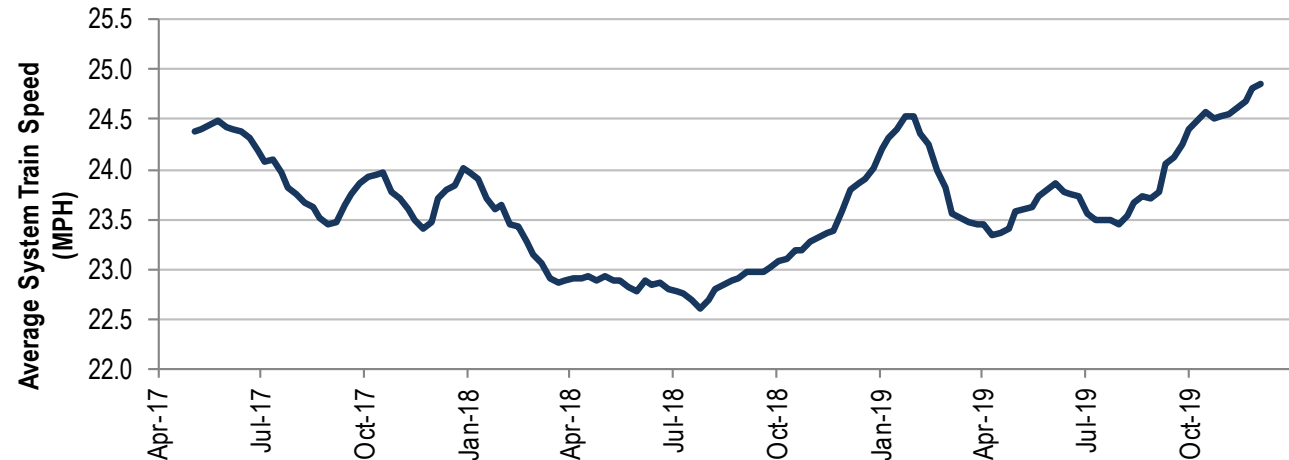
	Average SE (2017-18)	Adjusted SE	Average Total Debt (2017-18)	2018 Net Income + After-Tax Interest Exp
Railroad				
CNI	C\$17,149	C\$63,693	C\$12,148	C\$4,169
CP	C\$6,537	C\$28,809	C\$8,709	C\$2,137
CSX	\$13,651	\$38,863	\$13,794	\$3,694
NSC	\$15,861	\$45,813	\$10,909	\$2,910
BNSF	\$42,829	\$103,678	\$24,801	\$5,932
UNP	\$22,640	\$68,832	\$22,299	\$6,564
KSU	\$4,681	\$13,536	\$2,831	\$685
Average				

2018 Actual Average ROIC	2018 Adjusted Average ROIC	Variance
14.2%	5.5%	(870bp)
14.0%	5.7%	(830bp)
13.5%	7.0%	(650bp)
10.9%	5.1%	(580bp)
8.8%	4.6%	(420bp)
14.6%	7.2%	(740bp)
9.1%	4.2%	(490bp)
12.2%	5.6%	(660bp)

Note: Return on capital based on Wolfe Research calculations (not STB methodology). Total Debt includes off-balance sheet debt.
Source: Company reports; Wolfe Research.

Rail Service Has Materially Improved Recently

**Average Rail Train
Speeds**
(6-Week Average)



**Wolfe Quarterly
Shipper Survey –**
Shipper Perceptions of
Rail Service vs. Last
Year

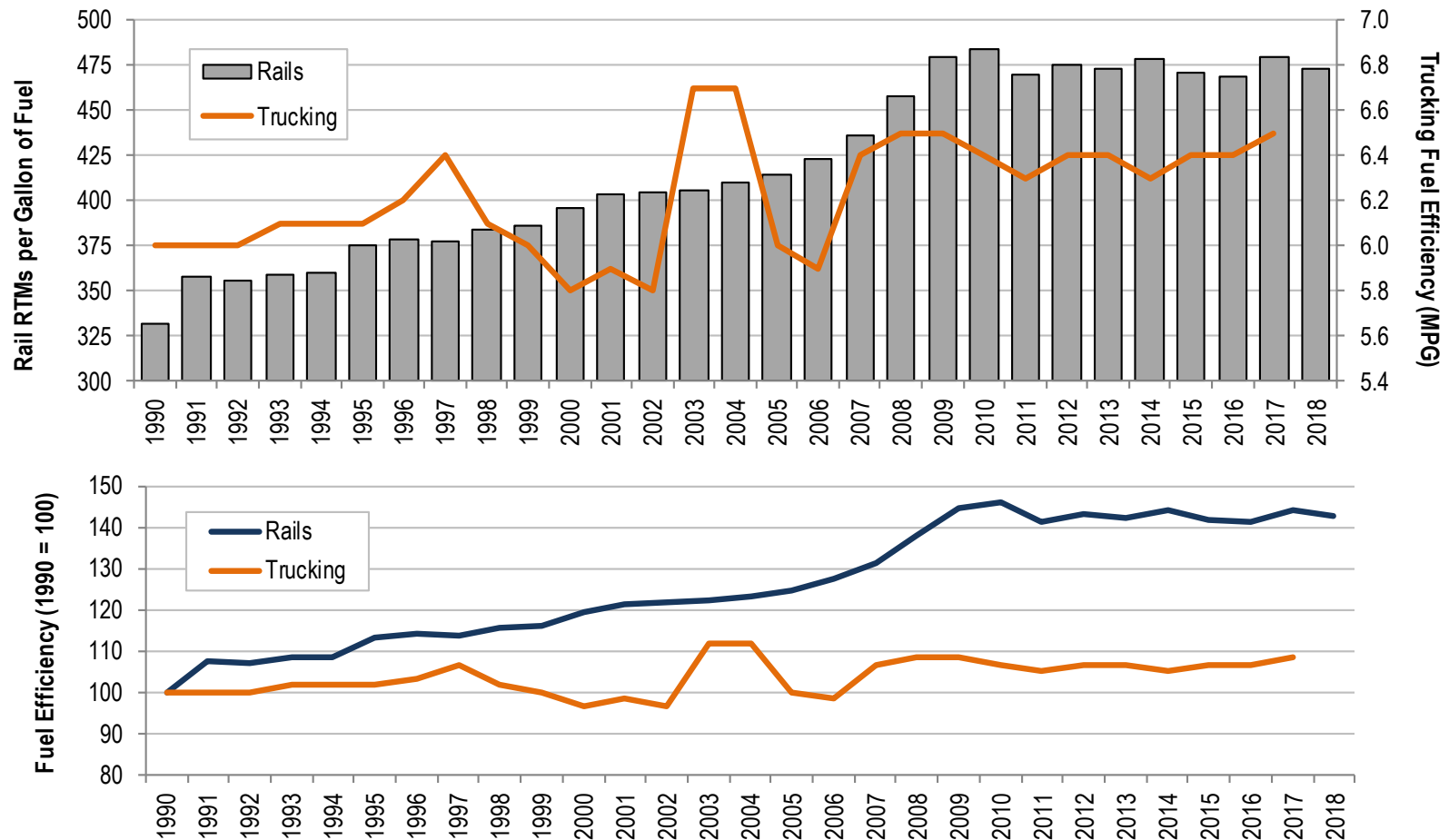
1 = Strong Decline
3 = No Change
5 = Strong Improvement



Source: STB; Wolfe Research.

Fuel Efficiency – Rails vs. Trucking

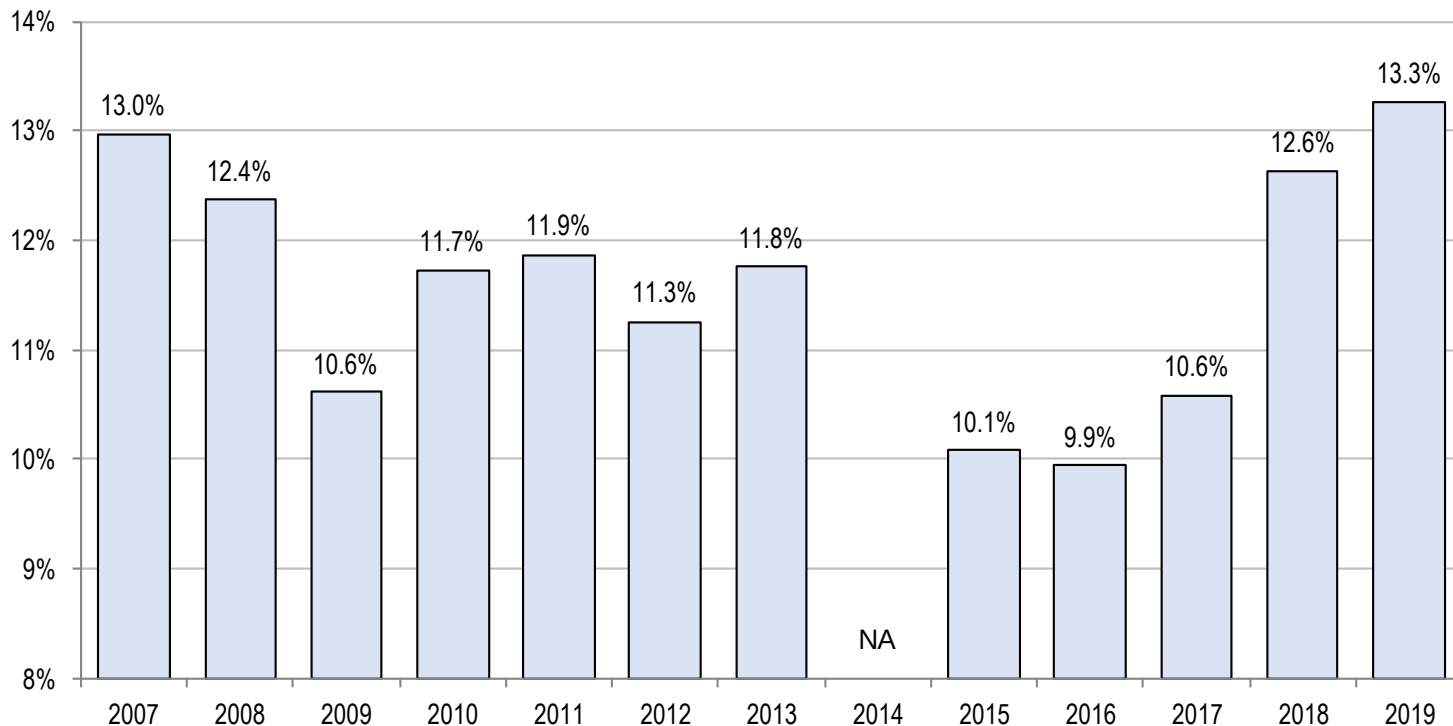
Rails Are Significantly More Fuel Efficient than Trucks



Source: AAR; EIA; Wolfe Research.

According to Shippers, Rail Rates Are Consistently Cheaper than Trucking Rates

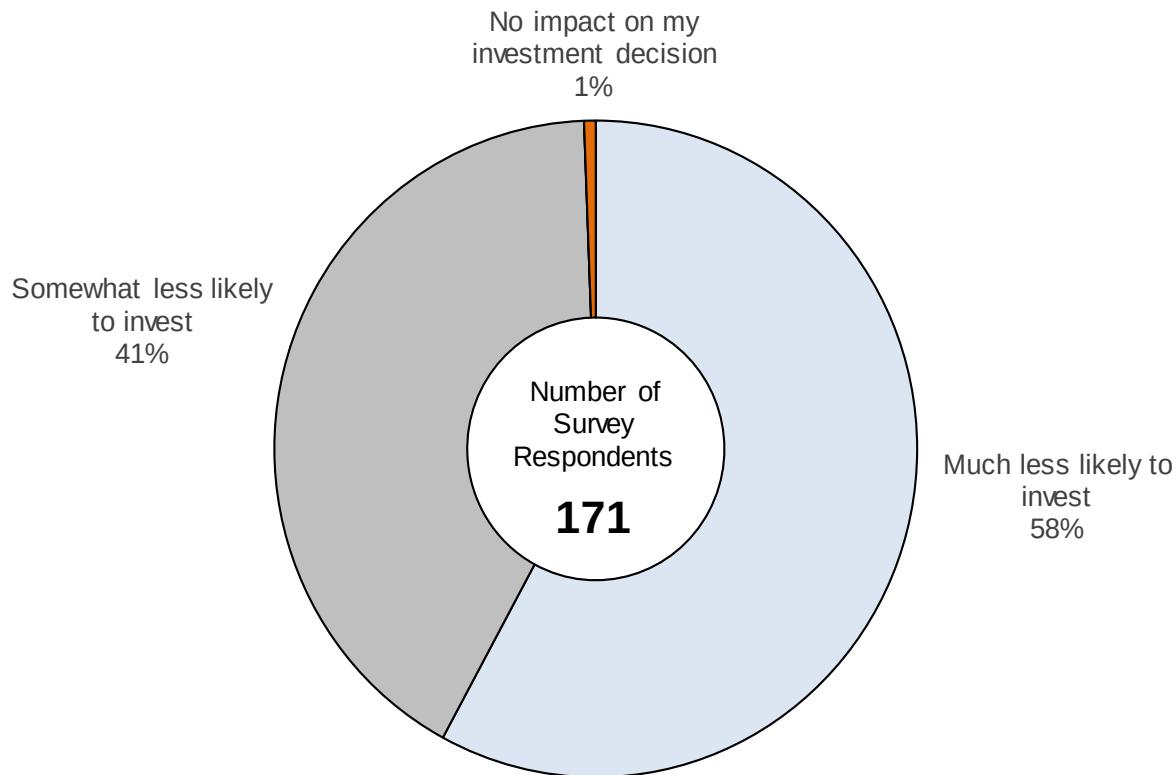
Wolfe Shipper Survey – Where rails and trucks compete, how much cheaper are your railroad transportation costs, on average, compared to comparable truckload movements?



Note: Average of quarterly responses each year. Question not asked in 2014.
 Source: Wolfe Research.

Investor Poll Question – STB Caps on Rail Pricing Would Limit Private Investment in Rail Stocks

If the STB enforced constraints on pricing (such as pricing caps) for rails that are deemed long-term revenue adequate, would you be more or less likely to invest in railroad stocks?



Source: Wolfe Research.

Summary

- ❑ The state of the Rail industry is strong with record profit margins and free cash flow.
- ❑ But we don't see evidence of excessive rail pricing power, with Rail pricing materially lagging TL pricing increases over the past 5 and past 30 years.
- ❑ Rails are significantly more capital intensive than any other freight transportation industry.
- ❑ While reported rail returns on capital have improved materially, “real” returns for rails on a replacement basis are much lower than reported returns and still well below the industry's cost of capital.
- ❑ Following the widespread implementation of precision scheduled railroading (PSR), rail service levels have improved materially this year, aided by weak volume trends
- ❑ Investment in Rail infrastructure is critical:
 - ❑ Rails are significantly more fuel efficient than TLs
 - ❑ Our survey work consistently reveals that Railroad rates are 10%-15% cheaper than comparable lane-by-lane Truck rates
 - ❑ Rails can help relieve highway congestion – 1 double-stack intermodal train can take up to 300 trucks off the nation's congested highways
 - ❑ Laying 1 mile of rail track is about 1/5 the cost of laying 1 mile of highway
- ❑ Meaningful rail regulatory reform could jeopardize the rail's ability to attract private investment.

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Peer Perform:	44%	2% Investment Banking Clients
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